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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,963	12/03/2003	David Ernest Hartley	PA-5351-RFB	4386

9896 7590 11/29/2007
COOK GROUP PATENT OFFICE
P.O. BOX 2269
BLOOMINGTON, IN 47402

EXAMINER

SEVERSON, RYAN J

ART UNIT	PAPER NUMBER
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3731

MAIL DATE	DELIVERY MODE
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11/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/726,963

Applicant(s)

HARTLEY ET AL. CT

Examiner

Ryan Severson

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02 November 2007 has been entered.

Allowable Subject Matter

2. The indicated allowability of claims 15 and 16 is withdrawn in view of the newly discovered reference(s) to Brown et al. (5,769,887) and Greenberg et al. (2002/0198587). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 3, 4, 9, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al. (5,769,887).** Brown et al. (hereinafter Brown) reference discloses the prosthesis substantially as claimed including a plurality of self-expanding stents (22, see figure 4c) connected together by links (23) and having a graft (12) covering at least one stent (22b) to define a covered portion and an uncovered portion. The uncovered portion is in the form of a spiral or zig-zag configuration (see figure 4d).
5. Regarding for example claim 3, defining which end the graft cover is on the stent is simply a matter of relative orientation. Since the structure as claimed is disclosed by Brown reference, the limitations of the claim are met.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 2, 5, 6, 8, 17-20, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (5,769,887) in view of Aiba et al. (6,221,096).**
8. Regarding claims 2, 8, 17 and 23, Brown reference further discloses that *at least* one stent is covered by the graft (see column 4, line 60 through column 5, line 6) to seal the graft to the vessel wall. However, Brown does not specifically disclose three stents covered by the graft. Attention is drawn to Aiba et al. (hereinafter Aiba) reference,

which teaches a graft may cover three stents (see figure 3) to more effectively seal the graft to the vessel wall. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have three stents covered by the graft, as suggested is possible by Brown and specifically disclosed and taught by Aiba to more effectively seal the graft to the vessel wall.

9. Regarding claims 5, 6, and 18-20, Brown reference does not disclose the graft is stitched to the stents. Attention is again drawn to Aiba reference, which teaches the use of a suture to stitch the graft to the stent (see column 5, lines 1-3) to provide a more secure connection between the graft and the stent. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to stitch the graft to the stent of Brown reference, as taught by Aiba reference to provide a secure connection between the stent and graft. Further, the use of a specific knot would have been obvious as the claimed knots provide no unexpected results.

10. Regarding claim 22, the combination of Brown with Aiba does not disclose the uncovered portion comprises 8 to 10 stents. However, it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Therefore, since no new and unexpected result is produced by merely duplicating the existing uncovered stents, the use of 8-10 stents would have been obvious to one of ordinary skill in the art.

11. Claims 7, 11, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (5,769,887) in view of Greenberg et al. (2002/0198587).

12. Regarding claims 7 and 11, Brown reference does not disclose the use of barbs on the stent. Attention is drawn to Greenberg et al. reference, which teaches the use of barbs (40, see figure 2) to provide a secure connection between the stent and the vessel wall (see paragraph 28) to prevent migration of the stent in the vessel.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the barbs of Greenberg reference with the prosthesis of Brown reference to prevent migration of the stent in the vessel.

13. Regarding claims 15 and 16, Brown reference discloses the method substantially as claimed including providing the prosthesis as described above. Further, Brown reference discloses deploying a device endovascularly using radiography and releasing the stent that is constrained in a sheath and withdrawing the sheath and deployment device (see column 6, lines 35-51). However, Brown reference does not specifically disclose treating an aortic dissection and the deployment device using a trigger wire. Attention is again drawn to Greenberg reference, which teaches using a stent and delivery device with a trigger wire (see paragraph 44) to treat an aortic dissection (see paragraph 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the prosthesis of Brown to treat an aortic dissection and being deployed with the assistance of a trigger wire, as taught by Greenberg reference to seal off the dissected portion of the aorta.

14. **Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (5,769,887) in view of Aiba et al. (6,221,096) as applied to claim 17 above, and further in view of Greenberg et al. (2002/0198587).** The combination of Brown with Aiba does not disclose the use of barbs on the stent. Attention is drawn to Greenberg et al. reference, which teaches the use of barbs (40, see figure 2) to provide a secure connection between the stent and the vessel wall (see paragraph 28) to prevent migration of the stent in the vessel. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the barbs of Greenberg reference with the prosthesis of Brown in view of Aiba references to prevent migration of the stent in the vessel.

Response to Arguments

15. Applicant's arguments with respect to claims 1-12 and 15-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Severson whose telephone number is (571) 272-3142. The examiner can normally be reached on Monday - Friday 9:00 - 5:30.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

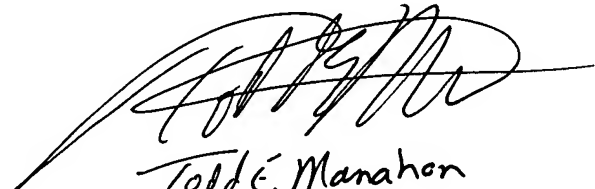
Application/Control Number:
10/726,963
Art Unit: 3731

Page 7

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R.S.

Ryan Severson
November 20, 2007



Todd E. Manahan
SPE 3731